

ECON 440 Analysis of Public Finance
University of North Carolina at Chapel Hill
Fall 2020 Syllabus

Instructor: Qing Gong (qinggong@email.unc.edu)
Lectures: T/Th 8:00 – 9:15 AM (440-001)
T/Th 9:45 – 11:00 AM (440-002)
Office Hours: Remote over Zoom every Thursday 4-6 pm.

Prerequisites: ECON 400 and 410 (C or above)

Textbook: Jonathan Gruber, *Public Finance and Public Policy* (6th edition). Worth Publishers, 2019. The 5th and 4th editions are both good substitutes. The textbook is recommended but *not* required.

Special Requirement for Teaching/Learning This Fall

Essential resources and technologies: The current mode of instruction for this class is “face-to-face/hybrid,” and the *hybrid* component makes it *absolutely essential* that you have regular access to the following resources and technologies:

- **Sakai:** Announcements, materials, and assignments will all be posted on Sakai (<https://sakai.unc.edu/portal/site/econ440fa20>). Please be sure to check the site regularly and/or turn on notifications to get prompt updates.
- **Zoom:** Some lectures and all office hours will be on Zoom. I will share the link and password for the Zoom meetings with you via secure Sakai messages. It is strongly recommended that you join these meetings and access the recordings only with your UNC Zoom account.
- **Gradescope:** Homework assignments and midterms are collected, graded, and returned on Gradescope. An invitation will be sent to your UNC email address and you should be able to add the course with the entry code **M732P6**.
- **Scanning tools:** Only electronic copies of your work will be accepted. You can either use a scanner or a scanner app/software. Pictures taken with a (smartphone) camera are acceptable only if the image quality is reasonably close to that of a scan.

Community Standards in Our Course and Mask Use. This fall semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community – your classmates and me – as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the [Office of Student Conduct](#). At that point you will be disenrolled from this course for the protection of our educational community. **An exemption to the mask wearing community standard will not typically be considered to be a reasonable accommodation. Individuals with a disability or health condition that prevents them from safely wearing a face mask must seek alternative accommodations through the [Accessibility Resources and Service](#).** For additional information, see [Carolina Together](#).

Your health and well-being are of utmost importance. The pandemic has caused and is still causing anxiety, stress, and unforeseen burdens for all of us. I want you to know that I take the health and safety of everyone in this class very seriously. If you have any concerns about your return to campus or anticipate not being able to complete some of the requirements below for reasons out of your control (technical, medical, or anything else), please reach out to me. I am ready to help and figure out alternative arrangements that work for both of us and ensure fairness. In case you are feeling unwell and cannot come to in-person lectures, you do *not* need to submit any supporting documentation *unless* you expect to miss an exam.

Course synopsis: In this course, we will study the role of government in the economy. The main goal is to develop a set of tools for analyzing the role the government plays and the impacts of its policies on the lives of its citizens. In particular, we will begin by discussing why government intervention is needed in a market economy; we then examine government expenditures (e.g. social security, education, health care) and government revenues (different types of taxation). We will cover a wide range of classic topics in public finance, with a focus on current policy issues on the environment, social security, health care, education, taxation, and, of course, the current pandemic. Some examples are:

- When and why does the market fail and it's time for the government to intervene? Is government intervention the only remedy to market failures?
- What are the popular voting rules? What are the determinants of voter turnout? What does the Median Voter Theorem imply about candidates' platforms in primary vs general elections?
- What is the difference between a fully funded social security system and the pay-as-you-go system? What is the nature of the U.S. social security system?
- Why do people value health insurance? What causes some insurance markets to unravel? What are the twin problems with the U.S. health care system?
- What's the reason for the "marriage penalty" in the U.S. tax system?
- How will government programs like the EITC and CARES stimulus check affect people's decisions and their economic wellbeing?

Course requirements and grading policy: Please note that the following policy is designed for the current mode of instruction. If certain requirements are no longer feasible/relevant/fair due to a change in the delivery method, the grading policy will be adjusted accordingly. If that happens, I will make sure the changes will be more favorable to you and always offer you the option to stick to the old policy.

Your course grade will be based on three problem sets, three exams, and participation. A numeric grade will be calculated based on the weights specified below, and then converted to a letter grade according to the grading scale in the **Class Policies** attached to the end of this syllabus. Grades will not be curved or "rounded up" at the end of the semester.

Problem sets: 8% x 3

The problem sets include problems indicative of those in the exams and will be assigned throughout the semester. Due to the size of the class and limited TA hours, we could not provide lengthy explanations or corrections while grading. Instead, detailed solutions will be posted in a timely fashion and students are expected to read them carefully.

Exams: 20% for Midterm 1 + 20% for Midterm 2 + 30% for the Final

- The two midterms will be take-home exams. See Class Schedule for the dates.
- The date and time of the final exam is yet to be decided by the University Registrar.
- Practice exams from previous years will be provided before each exam.

Participation: 6%

Participation in the discussions during lectures is an effective way to assess and, more importantly, help with your learning. Participation is evaluated based on:

- **Sakai surveys (1%):** I'd very much like to know your preference when making certain decisions about this class. Filling out *any* short, multiple-choice surveys on Sakai (when there is one) to get the credit, regardless of what your responses are, of course.
- **Consistent attendance (4%):** It is crucial for you to attend the lectures. While I do not take attendance for in-person lectures, I will do so for Zoom lectures when there is one. I understand that not everyone can attend the live lectures for various reasons (e.g. a different time zone), so both live attendance *and* viewing/downloading the recordings afterwards count as attendance.

You will get the 4% credit if you “attend” over 90% of the Zoom lectures by the end of the semester.

- **Questions and answers (1%):** 1% credit will be awarded for asking or answering course content-related questions in class, in the Zoom chat box, or during office hours.

Office hours: I will hold at least two hours of Zoom office hours per week. I will share with you a sign-up link with the time slots I’m available for each week. Please sign up for one or more 15-minute slots *beforehand*. The Zoom office hours will use the same meeting ID and password as the Zoom lectures.

Class schedule: Below is a tentative schedule for the semester, with the corresponding chapters in the Gruber textbook (6th edition).

Week	Dates	Topic	Chapter in Gruber 6e
1	8/11	Introduction to Public Finance	1
	8/13	Review of Theoretical and Empirical Tools	2, 3
<i>Part I. The Economic Basis for Government Activity</i>			
2	8/18, 8/20	Externalities and Government Intervention	5, 6
3	8/25, 8/27	Public Goods and Free Riding	7
4	9/1, 9/3	Public Choice and Political Economy	9
5	9/8	Review and Discussion 1	
	9/10	Midterm 1	
<i>Part II. Selected Issues of Government Expenditures and Policy in the United States</i>			
6	9/15	Government Expenditures and Fiscal Federalism	10
	9/17	Education	11
7	9/22	Social Insurance	12
	9/24	Social Security	13
8	9/29, 10/1	Health Care and Health Insurance in the US	14, 15, 16
9	10/6	Health Care Reform	15, 16
	10/8	Income Distribution and Welfare Programs	17
10	10/13	Review and Discussion 2	
	10/15	Midterm 2	
<i>Part III. Government Revenue, Government Debts & Economics of Taxation</i>			
11	10/20, 10/22	Taxation and the Theory of Tax Incidence	18, 19
12	10/27, 10/29	Deadweight Loss and Theory of Optimal Taxation	20
13	11/3, 11/5	The US Personal Income Tax System: Theory and Practice	21
14	11/10	Taxation of Savings	22
	11/12	Taxation of Corporate Income and Fundamental Tax Reforms	23-25
15	11/17	Review and Discussion 3	
16	TBD	Final Exam	

***** Please carefully read the Class Policies at the end of the syllabus *****
Staying enrolled in this class implies your agreement to these policies

**Class Policies For
ECON 440 Analysis of Public Finance
Fall 2020**

1. **Attendance:** Regular attendance is essential for doing well in this course. That said, I also understand that occasionally you have to miss a lecture. If you have to miss a single lecture, you do NOT need my approval or notify me in advance. If it is a Zoom lecture, you can always view the recording afterwards and still get both the material and the participation credit. However, you should let me know as soon as possible if you expect your attendance to be more frequently interrupted. Please note that it is your responsibility to get the content/announcements you missed during the class you did not attend.

2. **Problem sets:**
 - a. **Submission:** Scanned copies of the problem sets must be uploaded to GradeScope before the specified deadline. It is your responsibility to make sure the upload is successful and legible. Please try to avoid email submissions if at all possible – they are hard to keep track of, hard to grade, and also hard for you to get feedback or request regrades. Late submissions before solutions are posted will receive discounted grades. Submissions after solutions are posted will not be accepted.

 - b. **Collaboration:** You may discuss the reading materials and questions in the problem sets with each other; however, each individual must submit a separate problem set (i.e., you need to write/type up your own answers, not copies of others' answers) and each individual will be graded separately on the assignment.

 - c. **What to expect from the instructor:** The problem sets are carefully designed to assist with and assess your learning, and there should be sufficient information for you to solve it with the tools we learned in class. Hence, you should not try to get extensive help from me on how to approach the problems before they are due. While I would be happy to answer clarificational questions if there is a reasonable amount of ambiguity, you should not ask for hints, instructions, or answers on the questions. I will give hints to the entire class if there is a particularly challenging problem and will discuss common/typical mistakes after grading is done.

3. **Exams:**
 - a. **Missing midterms:** Take-home midterm exams will be distributed at 8 am on the day of the exam and be due in at least 24 hours, which is substantially more time than necessary to solve the questions. In fact, you should be able to finish the exam roughly during the time of a regular lecture (75 minutes). This means everyone will have enough time to work on the midterms, regardless of what your schedule looks like during those 24 (or more) hours. For this reason, the midterms cannot be rescheduled, nor will there be a make-up exam in case you miss one. The weights of the midterms are also non-negotiable and cannot be switched to the final exam.

 - b. **Exceptions:** An exception will be made for [University-approved absences](#). Students with this type of absence should contact me *before* the exam (if possible) and provide appropriate documentation within two business days of the exam.

 - c. **Final exam policies:** If an in-person final is to be held, it will be a traditional closed-book, closed-notes exam and the usual university policies apply. If the circumstances turn out to justify a take-home final, the above policies for the midterms will apply.

4. Grading

- a. **The grading scale:** Participation, problem sets, and exams will be given numeric grades; they are weighted to generate a numeric course grade (0-100), which is then converted to a letter grade using the following table:

Numeric score	Letter grade	Grade points	Numeric score	Letter grade	Grade points
[93, 100]	A	4.0	[77, 80)	C+	2.3
[90, 93)	A-	3.7	[73, 77)	C	2.0
[87, 90)	B+	3.3	[70, 73)	C-	1.7
[83, 87)	B	3.0	[67, 70)	D+	1.3
[80, 83)	B-	2.7	[60, 67)	D	1.0
			[0, 60)	F	0

- b. **Regrading requests:** Please submit requests to re-grade a problem set or an exam *in writing* within 7 calendar days after your work is returned. Please (i) read the solution thoroughly before you submit the request and (ii) include a short note explaining why you believe your answer should be re-evaluated. In such a case, I will re-grade the entire problem set or exam.

5. Course material re-distribution is strictly prohibited.

All course materials (including the audio/video recordings) are only intended for the currently enrolled students. Any re-posting elsewhere on the Internet or any other forms of re-distribution is strictly prohibited.

6. Textbook affordability.

I support the [Textbook Affordability program](#). I suggest that you make textbook purchase decisions *after* attending the first (two) lectures. Older editions of the book are very good substitutes and much more affordable. I've made digital copies of chapters that are particularly important available on the course reserve, and have two copies of the textbook (one 6th edition and one 4th edition) on reserve at the Undergraduate Library.

7. Accommodations.

I am more than happy to work with the Accessibility Resources and Service (ARS) Office to provide reasonable accommodations if you need them and are eligible. Please see the ARS Website for contact information and relevant policies: <https://ars.unc.edu>.

8. Honor Code.

Information, including your responsibilities as a student is outlined in [the Instrument of Student Judicial Governance](#). Your full participation and observance of the Honor Code is expected.

9. Title IX Resources.

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.